DES Methodology Subcommittee Meeting December 3, 2004

The meeting was called to order by David Lillie at 9:38a.m.

The meeting began with a short discussion about a correction to the minutes of the September 24, 2004 meeting and the feasibility of preparing detailed subcommittee meeting minutes. The minutes should state that Linda Strock will consult with the Arizona Attorney General's Office on the matter of potential liability issues to the POPTAC members, rather than legislative changes stated in the minutes.

Linda Strock indicated that the preparation of minutes for the Methodology Subcommittee meeting was time consuming and that DES didn't have the staff resources to support it. She said the minutes should summarize the actions taken. Harry Wolfe, however, thought that it was important to document all the issues and ensuing discussion. Chris Fetzer and David Lillie concurred. Tim Tilton said it was important to understand why decisions had been made. David Lillie, the Chair, said he would prepare the minutes for the Methodology Subcommittee meetings. Harry Wolfe volunteered to assist the Chair with the minutes.

Samuel Colon stated that there was a Special Census conducted for Maricopa City, but that DES had inadvertently not included it. Samuel said the draft estimates incorporated the Special Census for Maricopa City and added a population of about 1,000 to the city, as well as Pinal County and the state. There was no impact to any other county or local jurisdiction.

Tom Rex asked Samuel Colon if he took the vacancy rates and persons per household from the Special Census and applied it to the number of housing units, and Samuel said yes.

Richard Garr did not especially like the population numbers, and he expressed concern with the declining population estimates for some of his jurisdictions. Although he said he was competent in the methodology and understood that the population indicators suggested the decline, it was difficult to convince the elected officials that the population actually declined. He said there is no population handbook to pass out to the "officials."

Chris Fetzer noted that when there is a major difference between the Composite and the Housing Unit methods, it is hard to explain to jurisdictions that even though the number of housing units increased, the population declined.

Rich Garr said that next year we need to be careful. He said that the results next year need to be reproducible.

Sandy White said that her jurisdictions needed more time to consider the population estimates.

Linda Strock pointed out that the population estimates have to be done prior to the 15th of December as required by state law. The most current data need to be used. The issue always is data availability versus deadlines.

Linda Strock also stated that more information early on is better. She said there is a need to put emphasis on (1) data collection and review, and (2) methodology. If you have the right inputs and a good methodology, then, the output should be good.

Samuel Colon said that in the past, county estimates were reviewed in September and place estimates in October, but that schedule was delayed this year.

Chris Fetzer said that he would like to see the County and place estimates reviewed concurrently.

Anubhav Bagley pointed out that while next year is important, what has transpired this year provides the base for next year's estimates. Thus, any problems with this year's estimates will be carried over to 2005.

Harry Wolfe sees an issue with data variables up, but population down.

Tom Rex said that in Maricopa County a massive surge in housing units has occurred, but that population has not increased correspondingly (i.e., not as fast). He also noted that some units were inhabited by seasonal residents and others were purchased by investors. It is possible that the Composite Method provides a more accurate population estimate.

Linda Strock said we can't capture how the vacancy rates and persons per household variables are changing over time (viz., the accuracy gets worse over time). Lind said we need a handbook to explain these issues.

Tom Rex said that the Housing Unit Method could be overstating the population when the Composite Method is a lot lower.

Annubhav Bagley noted that in some counties the Composite Method was higher. However, the Composite Method in Maricopa County resulted in a higher population estimate than the Housing Unit Method.

Samuel Colon said that Pinal County had the largest difference between the results.

Chris Fetzer said that Tom Rex could write an article for the DES newsletter. He also said that local jurisdictions only think this way: permits times PPH equals total people.

Rich Gaar said we need an example of what could happen and that could go into the POPTAC handbook.

Dave Barber said that in the previous years we used different weighting factors for different counties.

Tom Rex responded that in the past the weighting was based on how the method did in comparison with the Census. He added that since we did not have consistent historical data we could not do that this time, and with the new Composite Method, we can't go back prior to 2000 to do an evaluation.

It was noted that some of the variables used in the Composite Method were more accurate than others. Medicare data, for example, are more accurate, while licensed drivers (MVD) data are not as good, and school enrollment is thought to be even less good (reliable).

It was stated that as long as errors are consistent over time, we are OK.

Chris Fetzer said that next year we will have to define shares. Samuel Colon said that last year we could add or subtract from balance of county.

Samuel Colon also stated that he would be sending out a survey to POPTAC members requesting that they address issues for next year.

Mila Hill asked if the estimates process involved the use of County Assessor data. Tom Rex said that data from the County Assessor's Office don't tell us if they are "residents."

Tom Rex noted that Tony Sissons had suggested using postal data for estimating population, but that an examination of the data showed that there were reliability issues. Tom Rex said every data series has problems. He said is "very frustrating" to look at data series and see problems with them (e.g., abrupt changes).

The final agenda item was county projections. Susan Kanzler explained a modification to the e-mail transmitting the projections. The estimates were from 2001-2004 not 2000 to 2004.

Susan Kanzler said that in high growth areas there is a need to adjust migration rates. Past projection series could be evaluated, e.g., looking at 1999 projection series high end numbers.

Tom Rex said it is reasonable to adjust using the interim series from the Census Bureau (post census). He asked Susan to compare migration rates by age from the 1990 Census versus the 2000 Census (state level).

Tom Rex noted that the method using migration rates was based on domestic migration and that immigration was not accounted for. He said that the problems with international migration were the lack of information on out migration and the difficulty of accounting for illegal aliens. He re-emphasized that international migration is a big issue in Arizona but it is not accounted for in the model (almost all are from Mexico).

Tom Rex said that the age distribution of international migrants is different from the age distribution of domestic migrants. He said that it used to be that single males migrated from Mexico, but now whole families and women of childbearing years are moving.

Susan Kansler said that she looked at birth rates and mortality. She explained how she made her adjustments. She has the option to adjust the first 10 years. Tom Rex stated that what needs to be done will vary by county.

Tom Rex said that Maricopa County seems to get more population growth than anticipated. He questioned whether such growth could continue, but he said that it was "highly judgmental."

Peter Kozy presented a graph showing the growth rate trend of the U.S. from 1940 to 2000. It shows a growth rate that is increasing at a decreasing rate. Tom Rex said that it seems reasonable. Susan will send details on what she will do.

Tom Rex suggested doing a run combining Maricopa and Pinal counties.

Anubhav Bagley said that he would like to know why adjustments were made and how they were made. He said that MAG has collected information on proposed developments in Pinal County and that he would be happy to share the information with DES.

Tom Rex presumed that adjustments are made to force the first year numbers to be closer to actual births and deaths and migration. He said the adjustments are only based on migration. He added that adjusting to an estimate which may have problems is risky.

Tom Rex asked if Greenlee County is losing population, would it continue? He said that in Iowa losses in population were projected, but that there was a turnaround. He added that the same thing could happen in Greenlee.

Christopher Mrela, ADHS, asked a question.

Richard Garr said that the price of copper dictated population growth.

Tom Rex said that the aging of the population will produce higher death rates. He continued that the model doesn't look at the age of migrants and race/ethnicity which influences the death rate.

Sandy White said that Marshal Vest from the University of Arizona produced a higher population projection than DES. Tom Rex said that Marshal Vest has a good economic model but questioned the demographic model that he uses. He stated that historically Pima County and Tucson had been over-projected.

David Lillie adjourned the meeting at 10:30a.m.

*The sign-in sheet shows 17 in attendance.